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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,340	04/21/2004	Shuhei Yada	2004_0589A	5472

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WASHINGTON, DC 20006-1021

EXAMINER

MANOHARAN, VIRGINIA

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/828,340

Applicant(s)

YADA ET AL.

Examiner

Virginia Manoharan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicants are advised that an application in which the benefits of an earlier application are desired must contain a specific reference to the prior application(s) in the first sentence(s) of the specification or in an application data sheet by identifying the prior application by application number (37 CFR 1.78(a)(2) and (a)(5)). If the prior application is a non-provisional application, the specific reference must also include the relationship (i.e., continuation, divisional, or continuation-in-part) between the applications except when the reference is to a prior application of a CPA assigned the same application number.

[Note this application is a CON of PCT/JP02/11377 filed on October 31, 2002].

Claims 9-16 are rejected under 35 U.S.C. 112, first and second paragraphs, as the claimed invention is not described in such full, clear, concise and exact terms as to enable any person skilled in the art to make and use the same, and fails to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear as to the tie-in or relationships between the adjusting step and the step of maintaining $B/A < 1.25$ since they are not specified in the claims nor are provided in the Examples and the Comparative Examples at page 11-20 of the specification. [None of the Examples and Comparative Examples mention arriving at the <1.25 by adjusting any of the parameters in the claimed

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Markush group . The Examples recite adjusting e.g., the heat load in a heat exchanger].

Claims 9-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a). The claimed "the collection column " in claims 12 and 14 lacks antecedent support.

b). It is unclear what constitute the claimed ' predetermined range" within the context of the claimed invention as it is not specified in the claims. See claims 14-16.

c). That water is distilled and/or that the reaction gas is supplied before collection are not positively recited as method or process steps in the claims.

d) It is unclear what "the method is conducted" in claim 9 is referring to, the method of collecting or the method of adjusting?

e).The claims are incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: the positive tie-in or relationships indicated above are missing in the claims.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 9-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0778255.

The EP ' 255 is applied for the same reasons as set forth at page 3 of the previous Office Action.

Applicants' arguments filed May 18, 2005 have been fully considered but they are not persuasive.

Applicants following arguments such as:

"... EP '255 does not describe any of the following features: the amount of water distilled from the collection device; the amount of the reaction gas supplied before collection; the amount of the aqueous medium used; and the moisture content in the aqueous medium, as a factor for adjusting the B/A... The Examples and Comparative Examples of the specification as summarized on page 19 in Table 1 demonstrate the unexpected improvement of the claimed invention in collection of acrylic acid in the bottoms of the column and unexpected improvement in reducing loss of acrylic acid from the top of the column... The cited reference clearly fails to teach or suggest the weight fraction A, or the weight fraction B. Moreover the cited reference fails to teach or suggest performing the process while maintaining the ratio of $B/A < 1.25$..." are not persuasive of patentability because of the following reasons:

Contrary to applicants' assertions, EP' 255 at column 3, lines 38-46 and column 3, lines 55-58 through column 4, lines 1-12, for examples, discloses the amounts of mixed gas (corresponding to the claimed reaction gas) supplied or introduced into the acrylic acid collection tower 101, and the amounts of the

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aqueous medium used respectively, and therefore would at least be suggestive of adjusting these parameters as argued.

Furthermore, while the <1.25 is not positively disclose, however, column 11, lines 10-13, and the Examples and Comparative Examples of EP '255 all mention the amount or concentration of the acrylic at the top and at the bottoms of the tower. Thus, it tells an artisan that an optimum range relative to the top and bottoms acrylic values exists.[Any experimentation done to find this optimal range is of the essence within the skilled of the art].

Moreover, the argued "unexpected improvements" in the specification, alleged to by applicants, are of no patentable moment as the results are not based on a comparative study with the closest prior art .

Thus, in the absence of anything which may be "new" or "unexpected result." a prima facie case of obviousness has been reasonably established by the art and has not been rebutted. Unexpected results must be established by factual evidence. Mere arguments or conclusory statements in the specification, applicants' amendments, or the Brief do not suffice. In re Linder, 457 F.2d 506, 508, 173 USPQ 356, 358 (CCPA 1872). In re Wood, 582, F.2d 638, 642, 199 USPQ 137, 140 (CCPA 1978).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Virginia Manoharan whose telephone number is 571-272-1450.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola, can be reached on 571-272-1444. The

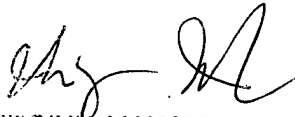
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fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VM

08/06/05


VIRGINIA MANOHARAN
PRIMARY EXAMINER
ART UNIT 1764
8/6/05